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# **Increasing Access to Psychological Therapies for people with psychosis: predictors of successful training**

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## **Abstract (190 words)**

*Background:* Cognitive behavioural therapy for psychosis (CBTp) is recommended for people with schizophrenia, but routine delivery remains limited. Obstacles to increasing access include inadequate training, organisational support and supervision, resulting in low levels of staff competence and confidence. This study is a preliminary evaluation of a CBTp training programme, designed to overcome these obstacles and to increase routine delivery of competent CBTp.

*Method:* Training outcomes for a pilot group and for the first three cohorts to complete training were analysed to identify predictors of successful completion and of therapy delivery after training.

*Results:* Objective competence was attained by 37 students (out of 58), who delivered therapy to over 160 service users. Successful completion was associated with previous CBT therapy experience. Delivery after one year was associated with working in a therapy rather than a care co-ordination role.

*Conclusions:* The programme succeeded in training therapists to deliver competent therapy. Our results suggest that preliminary training in CBT for other disorders may improve success rates in CBTp. Despite extensive service liaison, delivery remained problematic for care co-ordinators without role change and provision of dedicated time. The findings should inform future implementation strategies.

**Key words:** Cognitive behavioural therapy, CBT, psychosis, schizophrenia, training, implementation

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## **Introduction**

Cognitive behavioural therapy for psychosis (CBTp) improves psychotic symptoms, depression and social functioning, is cost-effective by virtue of reducing readmission, and is recommended in international guidance (NICE, 2003, 2009, 2011; Dixon et al., 2010). However, despite the powerful evidence base, and health policy drivers, access remains limited, with few therapists able to deliver NICE compliant CBTp. Attempts to improve access by developing the skills of the mental health workforce to deliver psychosocial interventions (PSI) for people with psychosis have had limited success: staff attitudes towards people with psychosis improve, but effects on skill development, therapy delivery and patient outcomes are very limited. Quality of training, supervision, and organisational factors are the key blocks to implementation (Berry & Haddock, 2008; Shafran et al., 2009; Lancashire et al., 1997; Tarrier, Barrowclough, Haddock & McGovern, 1999; Brooker & Brabban, 2004; Kingdon & Kirschen, 2006; Prytys, Garety, Jolley, Onwumere & Craig, 2011).

### *Development of a new training programme*

Our aim was to design a training programme to equip local mental health professionals to deliver CBTp in accordance with NICE guidance. We shaped our training model to address the known obstacles to increased delivery. We therefore liaised closely with local services and managers, developed increasingly stringent training contracts between managers and students, and established our curriculum in collaboration with the local NHS Trust Training and Education Department. Specific teaching sessions focused on service delivery, returning to teams, and the structures that needed to be in place in each service setting to ensure throughput of referrals. Other teaching reflected the latest developments in theory and practice in CBT and CBTp, and drew on national and international expertise. Programme

trainers had all previously worked as trial therapists, and had their own practice rated for competence. Students were expected to work under close supervision with a minimum of four clients over at least six months for 12 or more sessions (NICE, 2003). Close supervision in small groups (n=3-4), led by senior and experienced clinicians, continued throughout the duration of the programme. Local supervision arrangements following completion of the course were put in place during the final months of training, with a 'bridging' assessment of ongoing supervisory needs completed by the student; the new supervisor and the programme supervisor. Leavers were also able to access an ongoing supervision group, run by programme staff specifically for programme graduates, with the aim of maintaining skills and promoting implementation. Therapy competence was assessed according to recommendations from the emerging CBTp evidence base, using multiple full-session audiorecordings, supervisor report, and case studies (Garety et al., 2008; Dunn et al., 2012, Fowler, Rollinson & French, 2011). All students were required to present case reports on completed cases, and, following the pilot, two essays on cognitive models of psychosis. Hours of workshop, supervision and other teaching are shown in Table 1.

Insert Table 1 here

### *The current study*

We present an evaluation of the pilot programme and three subsequent intakes. We hypothesised that the training would result in the attainment of objective competence in delivering cognitive behavioural interventions for psychosis, and delivery of competent interventions. We also investigated the factors associated with successful completion of the course and with delivery of interventions one year following training. Specifically, we considered the impact of previous experience, both academic (studied to Masters level) and

clinical (worked as a CBT therapist), and of the student's role within their service when they completed the course.

## **Method**

### *Participants*

Seventeen local mental health service staff entered the pilot training programme. Over the subsequent three years, 41 further students enrolled on the programme. All applicants had completed approved training in a mental health profession and had been working in clinical settings with people with psychosis for at least two years. The professional background of students is listed in Table 2.

Insert Table 2 here

### *Measures*

Routine data were collected on previous professional and academic training and experience, and on successful course completion. Ratings of teaching and supervision quality were collected from students after each session. Self-report data on delivery of CBTp (number of clients seen, implementation issues and any changes in employment) was collected after 18 months of training for the pilot group, and at the point of completion of training and one year follow-up for subsequent cohorts. For the pilot evaluation, students, service users and team leaders gave consent to be interviewed by a research worker employed to evaluate the training. Themes were identified by the research worker using informal thematic analysis (Braun & Clarke, 2006), and were independently confirmed by two of the authors (SJ & JO).

Service users independently rated both the therapist and the therapy, on a 3-point scale (Kuipers et al., 1997) ranging from 0 (not satisfied) to 2 (very satisfied), and returned responses to the research worker.

*Therapy competence* was assessed using the *Revised Cognitive Therapy for Psychosis Rating Scale (R-CTPAS, Rollinson et al., 2008)* and the *Cognitive Therapy Scale (CTS, Young & Beck, 1980)*. The R-CTPAS comprises 21 therapy components derived from the Fowler, Garety & Kuipers (1995) manual which are rated as competently delivered (individualised to the client, matched and paced) or otherwise, and for frequency of occurrence on a -7 (non-adherent and present throughout the session) to +7 (adherent and present throughout the session) scale. Fowler, Rollinson & French (2011) recommend that the R-CTPAS is used in combination with the CTS, which measures competence in CBT for a range of problems. Eleven elements of CBT are rated from 0 (absent) to 6 (expert delivery).

For the pilot and subsequent run of the programme, in order for an audiorecording to pass, the same criteria were used as those in the Psychological Prevention of Relapse in Psychosis study (Garety et al., 2008); i.e. a dose of adherent therapy (score  $\geq 1$ ) on at least one item on the R-CTPAS, and no item below 2 on the CTS. One adherent recording was required for the pilot and three for subsequent years. We increased this for the remaining cohorts to ensure that only ‘full therapy’ was judged as competent, in the light of emergent data from the PRP trial demonstrating positive outcomes for ‘full therapy’ (Dunn et al., 2012): a substantial dose of adherent therapy on specified items (score  $\geq 3$ ) on the R-CTPAS and no item scoring below 3 on the CTS. Supervisors also provided a report of competence, based on rating successive, full audiorecordings, across the course of therapy. All assignments, including



therapy recordings, were marked by supervisors, validated by at least one other marker, and overseen by an external examiner.

### *Analysis*

Students completing successfully ('Completers') were compared to students who withdrew or failed ('Non-completers'), on dichotomous yes/no ratings of each of the three academic and professional background variables (studied at Masters level; worked as a CBT therapist; dedicated therapy role within the host service). Using the same variables, students reporting difficulties delivering at follow-up were compared to students reporting no difficulties. Chi-square analyses were used to assess between group differences. The size of the effect of each factor on successful completion was calculated using the Phi statistic (Cohen, 1992).

## **Results**

### *Completion of training – acquisition of objective competence*

Of the combined cohort total of 58 students, 37 (64%) attained objective competence; 13 of these required an extension to successfully complete the course. Eleven students (19%) withdrew, five from the pilot and six subsequently. Two pilot students (3%) failed to reach competence, and a further eight students from subsequent cohorts (14%) have an ongoing extension. Table 3 illustrates successful completion and drop-out rates for the pilot group and for successive cohorts combined.

Insert Table 3 here

*Therapy delivery* During the first 18 months of the pilot training course, successful students (n=10) saw a mean of 8 (8.3, SD=5.8) clients each for CBT for psychosis, over an average of 15 sessions. The subsequent cohort were required to have completed therapy (12 sessions or more) with at least two clients, and remaining cohorts with a minimum of four clients, in order to successfully complete the programme. In excess of 160 service users have therefore received NICE compliant therapy as a result of the training programme.

#### *Satisfaction & qualitative feedback*

*Students:* Ratings of satisfaction with teaching and supervision across all cohorts were routinely high, with very few suggestions for improvement. Students described being able, as a result of training, to pass on skills and knowledge within their teams, and to develop a specialist role within their team. All completing pilot students (n=12) commented on positive changes in their clients as a result of the intervention. Four students (33%) reported interpersonal difficulties with colleagues in relation to being away from the team and adopting a specialist role, and lack of understanding of their role and skills within the team.

*Managers:* Of the 13 managers of students completing training, ten gave a full interview, two a shortened telephone interview, and one had no feedback as the staff member had left the course early. All of the managers reported a noticeable impact upon students following their training, mentioning improved confidence, increased skills, personal development and supervising others in the team. They also reported improvements in the clients who were seen for therapy by the students: fewer relapses, clients approaching their problems in different ways and improved overall client engagement.

Nine of the managers (69%) thought that having a member of their staff trained in CBT for psychosis had benefited the team in general. Benefits identified related to the team thinking and working with clients in new ways and trainees bringing their skills and ideas back to the team. Five managers (38%) reported increased interest in and discussion about CBT and other talking treatments in their teams. However, four managers (31%) also acknowledged negative effects on the team, relating to difficulties in covering trainee caseloads and duties and managing the time away from the team which was reported to have caused some conflict and envy amongst team members.

*Service-users:* Of those clients who consented to being audiorecorded for the pilot course, 33% (n=18) completed satisfaction with therapy questionnaires. All of these clients reported having made progress during therapy and all stated that they expected to make progress in the future. 'Very satisfied' ratings were given by 72% of clients (n=13) and 22% rated themselves as 'satisfied' (n=4). One client reported that they felt that talking therapy was not right for their difficulties, but that they had enjoyed meeting with the therapist. In addition all of the clients felt that their therapist understood them fairly well (n=7) or very well (n =11) and 89% (n=16) reported feeling that they could trust their therapist a lot. Additional comments made by service users in satisfaction questionnaires related to being able to overcome fears, coping better with everyday life, being able to open up to the therapist and learning more about themselves. This was mirrored by the feedback given by service user consultants in the feedback interviews. All three clients talked about small positive changes in their quality of life that had taken place as a result of therapy.

*Factors impacting on successful completion*

Students who had previously worked as a CBT therapist were more likely to complete successfully ( $\chi^2=6.35$ ,  $df=1$ ,  $p=0.02$ ;  $\Phi=0.33$ ; medium effect size), with non-significant trends and small effect sizes for the impact of current role (therapist or other;  $\chi^2=4.46$ ,  $df=1$ ,  $p=0.06$ ;  $\Phi=0.28$ ) and of previous Masters level academic experience ( $\chi^2=3.73$ ,  $df=1$ ,  $p=0.09$ ;  $\Phi=0.25$ ). Neither the change from pilot status to an accredited programme, nor the introduction of the new competence criteria, led to changes in successful completion rates ( $\chi^2$  values  $< 3.7$ ,  $p$  values  $> 0.1$ ;  $\Phi$  values  $< 0.26$ ). Results are illustrated in Table 4.

Insert Table 4 here

#### *Factors impacting on delivery at follow-up*

Students completing successfully ('completers') were followed up after one year by e-mail, telephone or face-to-face, and asked about their current role and any job changes; delivery of CBTp; and obstacles to delivery. Information was obtained for all but two students; two further students had moved to non-psychosis services, therefore the total sample for follow-up was 33, all of whom remained in posts delivering services to people with psychosis. Twelve completers reported difficulties in delivering interventions. Of these, eleven were employed as care co-ordinators, and one as a neuropsychologist. In each case, insufficient dedicated time was cited as a difficulty. Low levels of referrals from the team were reported in five cases. No completer who was employed in a post where their primary purpose was to deliver therapy experienced difficulty in delivering CBTp on leaving the course. This is illustrated in Table 4. Only two care co-ordinator completers reported no difficulties practising: both had negotiated with managers to spend half of their time as a CBTp therapist and this agreement was honoured. Six of the care co-ordinator completers who reported difficulties at one year were subsequently successful in securing or negotiating new roles

which gave them more flexibility to practise. Five (all from the pilot programme) continued to have difficulty practising. Three completers in therapy roles reported a post change to a more specialist position within psychosis services. All three predictor variables were associated with delivery at one year, in that delivery problems were more common for those in a care co-ordination role ( $\chi^2=25.59$ ,  $df=1$ ,  $p<0.001$ ;  $\Phi = 0.88$ , large effect size), without Masters level academic experience ( $\chi^2=11.81$ ,  $df=1$ ,  $p=0.001$ ;  $\Phi = 0.60$ , large effect size), or without CBT therapist experience prior to completing the PGDip programme ( $\chi^2=7.48$ ,  $df=1$ ,  $p= 0.01$ ;  $\Phi = 0.48$ , medium effect size). Neither the change from pilot status to an accredited programme, nor the introduction of the new competence criteria, led to changes in delivery problems ( $\chi^2$  values  $< 3.2$ ,  $p$  values  $> 0.1$ ;  $\Phi$  values  $< 0.32$ ).

## **Discussion**

### *Summary of findings*

We have developed a training programme designed to overcome previously identified obstacles to the effective delivery of cognitive behavioural therapy to people with psychosis. From the outset, we liaised closely with managers and services and provided specific teaching on returning to teams and service development. We prioritised teaching quality and consistency by employing experienced trainers to deliver close and ongoing supervision, and we matched our competence criteria to evidence-based benchmarks to ensure that students met high and objective standards of competence upon successful completion of training. The programme was successful in training therapists from a range of professional backgrounds to a high standard of competence. During their training, therapists delivered high quality, NICE guideline compliant therapy to a large number of people with psychosis. Pilot results indicate that clients were satisfied with their therapy and their therapist, and that services and teams

benefited from having a staff member undertaking training. Success in training was predicted primarily by previous experience of working as a CBT therapist. In our dataset, this was confounded with the other predictors: role and previous Masters level academic experience, which also showed trend associations with successful outcome. Neither the transition from the pilot to an accredited programme, nor the change in competence criteria impacted significantly on success rates.

### *Training completion*

Our findings suggest that the easiest group to train are those seeking to refine existing CBT skills and develop specific skills to work with psychosis, rather than those developing CBTp skills for the first time, who are more likely to withdraw and to need to extend their period of study. Nevertheless, over 40% of novices have successfully trained to research trial standards, and further investigation of the factors associated with success and failure in training for this group will be important to inform future workforce development.

A substantial number of students (21/41, 51%) across all professional backgrounds have required an extension to complete the course. Just over a third of those starting the training (n=21) have to date failed to complete. Eight of these are ongoing and may in the future complete. Thirteen have either withdrawn or failed, three as a result of pressure of work despite being considered competent by supervisors. In total, therefore a sixth of those selected and funded for training have been unable to complete. This needs to be taken into account when considering workforce development plans: more time and flexibility may be required to accommodate fluctuating work pressure, life events (illness, pregnancy), and the learning needs of students who have no previous experience of CBT. We are in the process of

developing part-time pathways which allow for flexible completion over a longer period to address this, and will evaluate the impact on completion rates.

### *Delivery after training*

Despite extensive service liaison and ongoing supervision, high quality training and attainment of objective competence, it still proved difficult for staff in care co-ordination roles to continue to deliver therapy once training was completed. The majority of pilot students stopped delivering therapy because of the ongoing difficulty of managing their workload and continuing to protect their therapy time. Formal agreements did not prevent these difficulties. However, all but one of the students who reported delivery problems post-pilot went on to find a more specialised or autonomous role in which it was possible to deliver therapy, rather than stopping delivery. Numbers are at present small, so it is difficult to determine if this is a consistent effect, and what the potential mediators may be. However, we would hypothesise that the combination of an academic qualification attesting to a high standard of competence, confidence in their own ability arising from close supervision, and having seen positive effects of their therapy upon clients, are key factors in the decision to seek a solution which involves significant upheaval, in order to continue to deliver therapy. A larger sample of care co-ordinators is required to test this hypothesis, and the impact of demonstrable competence on subsequent ability to deliver therapy will be an area for future research.

### *Assessment of competence*

We matched and revised our assessments of competence in accordance with the developing evidence base. In order to ensure competence, we found that we needed to increase the number of formally assessed audiorecordings from one in the pilot study, to three for

subsequent cohorts. We also found that individual feedback on multiple formative audiorecordings was required in order to ensure that students had the necessary learning experience to achieve competence. Fairburn and Cooper (2011) suggest that the assessment of multiple full sessions is indeed the most reliable way of determining competence using current tools, but note the intensive workload for both students and staff, which inevitably increases costs. In the absence of an evidence base for the degree of competence needed to deliver effective therapy, and the most efficient methods for achieving this, Fairburn & Cooper question the current approach of training students to deliver competent *sessions* (as required by the current accepted CTS criteria), and advocate a focus on the acquisition of specific skills in both training and assessment. We are currently piloting this approach.

#### *Implications for future implementation*

There are clear implications of these findings for workforce development. Although we succeeded in training care co-ordinators to deliver competent therapy, they were only able to continue do so by changing their roles – delivery of formal therapy and care co-ordination were hard to combine. Training was intensive and costs were therefore high, both in terms of trainer time and replacement costs for staff. Against the backdrop of the previous decade of experience of training initiatives, our findings suggest that previous ambitious plans to disseminate therapy skills across all members of the workforce may not be realistic. A dedicated therapy role appears to be necessary for delivery, irrespective of profession. Although care co-ordinators are more likely to have difficulty establishing these roles, our limited evidence suggests that once time is available, delivery will follow. The implication is that for those in a care co-ordination role, a post change should be planned alongside the investment in training. If no post change is planned, the staff member is likely to fail to deliver therapy subsequently, and/or will seek employment elsewhere.



Formal CBTp training in isolation, therefore, although assuring competent delivery, will not address the implementation issue of capacity. As it is unlikely that the majority of the workforce will be afforded protected therapy time, there will be limits to the amount of NICE compliant CBTp that can be delivered to service users at this time. The problem of workforce capacity limiting access to evidence-based psychological interventions may therefore persist, until we are able to develop and evaluate more readily disseminable interventions, which lend themselves to alternative implementation approaches.

One such approach, supported by the UK DH Increasing Access to Psychological Therapies initiative to widen access to evidence-based psychological therapies for people with depression and anxiety, is a ‘stepped care’ model. Stepped care services offer brief, manualised or computerised, ‘low intensity’ interventions to larger numbers of people, and reserve formal ‘high intensity’ interventions for the fewer people with more severe or enduring problems. This model might present a more pragmatic starting point for increasing access to evidence-based therapies for people with psychosis.

At this stage, the evidence base for low intensity intervention in psychosis is not extensive, but it is accruing, and there have been positive results for some training initiatives which target frontline mental health staff (e.g. Waller et al., in revision; Turkington, Kingdon & Turner, 2002; Turkington et al., 2006). However, whether even these interventions can be delivered alongside a care co-ordination role remains an area for future investigation, which will have significant implications for plans to extend the IAPT initiative to people with severe mental illness such as psychosis.

### *Limitations*

We have used a naturalistic, uncontrolled design, with a small number of self-selected participants. Our findings therefore have limited applicability to the problem of larger scale workforce training. Other than the pilot satisfaction data, we lack information on client outcomes. It remains unknown whether training therapists to competence has a positive impact on clinical outcomes for clients, and the relationship between competence and outcomes. This is essential for developing minimum training standards and making training as cost-effective as possible (Rakovshik & McManus; McManus, Westbrook, Vazquez-Montes, Fennell & Kennerley, 2010; Fairburn & Cooper, 2011). Our focus was on CBTp specifically, and may not generalise to CBT in all specialities. Nevertheless, the training and workforce development implications are likely to be relevant to many areas of secondary mental health care, as they have arisen from working with a group of complex service users with multiple and heterogeneous difficulties, in the context of overstretched and under-resourced services. A final, but important, limitation is that we do not have consistent competence ratings for students at the start of the programme, and cannot therefore formally demonstrate an increase in skills following the CBTp training. It is possible, therefore, that successful students were already competent at the start of the course. Although our experience as supervisors indicates that this is not the case, and that all students made substantial gains, formal demonstration of this is necessary.

### *Conclusions*

It is possible to train mental health staff from different professional backgrounds to deliver cognitive therapy interventions for people with psychosis to a high standard of competence. The majority continue to deliver interventions on completing the course. Delivery is enhanced when therapists are employed in dedicated posts. Formal evaluation of gains in competence through training, and the impact of training on service user outcomes is required

in future research, as is a larger scale comparison to a control group. Nevertheless, our findings should guide both selection and workforce development in future implementation initiatives.

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**Table 1. Hours of teaching required for completion of the Postgraduate Diploma in CBT for psychosis**

<b>PGDip CBT for Psychosis – Current contact time/directed study</b>	<b>Hours</b>
<b>Workshop/seminar teaching</b> - clinical skills and academic background	120
<b>Small group supervision</b> - weekly supervision in groups of 3-4 using audiorecording, role play and case discussion	66
<b>Individual clinical supervision</b> - individual feedback on a minimum of 14 audiorecordings	10
<b>Closely supervised clinical work</b> - completed CBT for psychosis therapy on a minimum of 4 clients @ at least 12 <sup>1</sup> sessions (minimum) over at least 6 months each.	48
<b>Other clinical work</b> - students work therapeutically with people with psychosis in local services for at least two days/week. This work is logged and can be brought to group supervision.	476
<b>Other academic work</b> - reading, essay writing, case reports	500

<sup>1</sup>Now 16 sessions in line with NICE (2009) guidance

**Table 2. Professional breakdown of staff undertaking training**

<b>Profession</b>	<b>Cohort</b>			
	<i>2003-5 (Pilot)</i>	<i>2006-7<sup>1</sup></i>	<i>2007-8<sup>1</sup></i>	<i>2008-9<sup>1</sup></i>
<i>Nursing</i>	9	2	6	2
<i>Occupational therapy</i>	2	0	1	1
<i>Social work</i>	2	0	0	0
<i>Clinical psychology</i>	2	7	9	10
<i>Counselling psychology</i>	2	3	0	0
<i>Total</i>	17	12	16	13

<sup>1</sup>*From 2006, the programme has run as an accredited Postgraduate Diploma of King's College, London, Institute of Psychiatry*

**Table 3. Completion rates for the pilot training and subsequent cohorts**

<b>Pilot - 2003-5</b>		<b>2006-9</b>	
Successful Completion - Independent therapist <sup>1</sup>	4	Successful Completion (1 year)	14
Successful Completion - Developing therapist <sup>2</sup>	6	Successful Completion (2+ years)	13
Low intensity therapist <sup>3</sup>	2*	Extension <sup>4</sup>	8
Withdrew <sup>5</sup>	5	Withdrew <sup>5</sup>	6*
Total	17	Total	41

*Key: \* 3 students who failed to reach competence are counted in these categories*

*<sup>1</sup>Independent therapists: acquired good skills, fully competent; <sup>2</sup>Developing therapist: novice level; <sup>3</sup>Low intensity therapist: below novice level; delivering 'CBT informed' interventions-coping strategies, graded exposure and relaxation; effectively failed the course*

*<sup>4</sup>Reasons for extension: Medical (n=6); personal (n=2).*

*<sup>5</sup>Reasons for withdrawal: Personal (n=6; half of these students had actually attained competence in audiorecordings, but had not completed all other assignments); medical reasons (n=2); academic failure (n=1); found the course not for them (n=2).*

**Table 4. Role and previous experience as predictors of successful completion and problems with delivery for all students (n=58)**

	n	Successful completion	Withdrawal/ Failure Total	Ongoing Extension	Problems delivering at 1 year
<b>Role</b>					
Therapist	30	23	4	3	0
Care Co-ordinator	27	13	9	5	11
Other <sup>1</sup>	1	1	0	0	1
<b>Previous Academic experience</b>					
Masters level	38	27	5	5	4
Below Masters level	20	10	8	3	8
<b>Previous experience as a CBT therapist</b>					
Yes	32	25	4	3	4
No	26	12	9	5	8

<sup>1</sup>One neuropsychologist